South Bay Woodworkers' News

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President's Column

Fellow Woodworkers,

In June, Steve Kelem and I attended an early reveal of the Shaper Origin Bench Pilot at Shaper Headquarters in San Francisco. They had the Bench Pilot set up on a cart—similar to the one Steve demonstrated a couple of meetings ago. After seeing it, I immediately told Steve I wanted to build a cart like that for myself, and he said he'd like one as well.

A few months later, we met at a coffee shop to work on the design. The cart shown at the reveal is the "Edu Cart," originally designed for teachers. We both wanted to customize it. Steve, who is skilled with the cabinet design software he demonstrated at a past meeting, added a chamber with a cabinet door to his version. I modified mine to include a section for Festool XXL Systainers and widened another chamber on both sides to accommodate Festool drawers that require a 16.81" width.

I was genuinely impressed by how many hours Steve spent redesigning the cart. After that, I went to Moore & Newton Lumber in San Leandro, bought about a dozen sheets of Baltic Birch in two thicknesses for both of us, and delivered them to Steve's garage. Cutting the parts on Steve's 4x8 CNC took multiple visits since we both have busy lives.

I then assembled my roughly 26 component parts into three modules, combined them, added wheels and the top, and installed 12 Festool drawers—enough to hold 12 standard Systainers plus two XXL ones. I'm now unpacking the Bench Pilot, which will live on top of the cart.

I'll be giving a presentation on this process and sharing details about a serious setback Steve experienced while cutting his parts, almost a fire, plus several part failures.

Please come to the meeting prepared to take home some hardwoods that were donated to the club. They are completely free (though Alan and I did have to pick them up!). You're welcome to cut the pieces on-site if needed.

See you on the 25th, please stop by even if you can't stay for the full presentation.

Jay

Meeting Location

Saratoga Federated Church Postal Annex Building
14376 Saratoga Ave., Saratoga, CA
Click **here** for map and directions.

October Meeting in Review

Milind Joshi and **Dave Burkett** demystified how artificial intelligence is becoming an invaluable resource in the modern workshop. They perfectly captured the theme from last month's newsletter, framing AI as a tool that "may prove to be another tool in our kit—helping us make better decisions, avoid mistakes, and free up more time for the part we really love: creating." The presentation went beyond theory, providing a hands-on look at how this powerful new tool can be put to practical use in our own shops.

Unpacking AI's Roles: From Assistant to Expert Advisor

Milind and Dave demonstrated that AI can wear several different hats in the workshop, serving as a versatile partner in our creative process. They broke it down into a few distinct roles:

- **AI as Your Assistant**: Think of a tireless apprentice who can handle the prep work. Need to generate a cut list for a Shaker-style coffee table? Done. Want to estimate the total cost of materials or calculate the surface area for finishing? No problem. AI can even write out detailed, step-by-step instructions for a complex task like refinishing a scratched walnut tabletop, saving you time and preventing costly errors.
- **AI as Expert Advice**: This is where things get truly impressive. The AI can act as a seasoned mentor, drawing on a vast repository of knowledge to answer highly specific questions. For instance, you can ask for the most efficient sanding sequence to get a mirror finish on end-grain walnut, analyze the structural pros and cons of using a plywood back versus solid wood panels in a cabinet, get critical advice on wood moisture content for a project, or even receive restoration guidance for specific, historically significant pieces like Pierre Jeanneret chairs.
- **AI as a Sparring Partner**: Perhaps the most intriguing role is using AI to challenge your own thinking. This dialogue can push your creativity across different domains, from debating design philosophy ("Why shouldn't I mix Shaker simplicity with mid-century modern metal legs?") to challenging traditional techniques and material use ("Hide glue feels outdated...what's wrong with using modern wood glue?"). It's a fantastic way to pressure-test your ideas and refine your project goals with greater clarity.
- **Bonus Role**: AI as the Club Historian: In a forward-looking demo, Milind and Dave showed how AI can serve the club itself. Using a tool like NotebookLM, we can feed our club's documents—years of newsletters and meeting notes—into an AI. It can then act as our historian, answering questions about past projects or even generating brand-new content, like an audio podcast summarizing all of the club's 2025 activities. It's an inspiring look at how AI can help us preserve and share our collective knowledge.

You can also check out the presentation slides here.

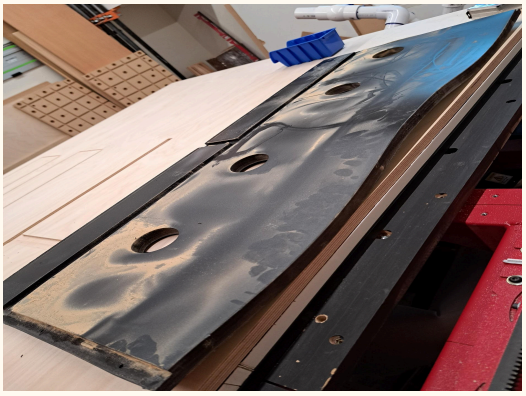
October Show'n Tell

Mateo McCullough's interest in metal engraving has turned into a preliminary project. Here is a chasing hammer and some basic engravers that he made. The hammer is made from an old bit of copper pipe fitting with Madrone inserts, steel ends and a beech handle. The engravers are made from 1084 high carbon steel with figured maple handles and everything is finished with linseed oil.

Mateo with his chasing hammer

The chasing hammer and some engravers Mateo made.

Steven Kelem avoided a shop fire when a jammed CNC bit sparked embers that spread to his vacuum system.
Read the full story below from Steve:
“I had a small scare on my CNC. Fortunately, I was watching it.
I was cutting a toolpath, when the router bit jammed, but was still spinning, and burning the wood! I immediately stopped the machine, raised the cutting bit and vacuumed up the sawdust that had been compacting in the cutting path, to keep it from catching fire. Then I noticed that while I was vacuuming, there were embers in the toolpath that were glowing red and smoking! I emptied the straw from my water bottle onto the embers and extinguished them!
Then I noticed that there was a lot of smoke in my shop...and it was coming from my shop vac! I had heard that sawdust can explode if it catches fire, so I unplugged my shop vac and rushed it outside to a barren area of dirt and emptied the contents. Not much was going on in the sawdust, but the filter was burning, so I sprayed it with water, spread out the sawdust and sprayed it too.
Then I worried that my dust collector and dust separator might have inhaled an ember, so I removed them from my shop and spread them out on another area of barren dirt... No embers there. The dust collector and separator were pretty full, so it was time to clean them out anyway. I also worried that, somehow, an ember might have landed in some sawdust on my shop floor that I hadn't cleaned well enough. I replaced the filter in my shop vac, and vacuumed the floor really well.
Then I noticed that my CNC's vacuum pump was pretty hot. I was worried that somehow an ember had gotten into it. There is no way to tell without disassembling the MDF cabinet that houses the vacuum pumps. No embers, but it was still running hot. Turns out the plumbing intakes didn't have enough flow, so I need to shorten the PVC pipes going into the vacuum pump.
So, no fire, but the MDF base of the cabinet has been warped about an inch from the heat! I can't use my big CNC to cut a new piece, so it's a job for Origin!
Getting back to the problem of the router bit jamming...it might be that the router bits are getting dull, so I ordered replacements.
But it also may be that the spindle is starting to fail. This was the second problem of a bit not being able to cut its toolpath yesterday! The spindle is 7 years old...maybe it's time for a replacement. The antifreeze solution for the water cooling had taken off all the paint coatings in the antifreeze pump, so maybe the dissolved paint had clogged the CNC spindle?
Time for a new cooling system and a new spindle.”



A picture of the vacuum cabinet base so you can see how warped it is!

Steve with a burnt filter from an ember that entered his dust collection system.

Calendar/Programs

Any additions or changes please contact **Steve Kelem** until **Tracie Johnson** returns.

2025	
August 26th	Steve Kelem - Shaper Origin accessory
September 23rd	Laura Marshall - infinity lamp Curtis Ullerich - Footbridge
October 28th	Dave and Milind - Incorporating AI into Woodworking
November 25th	**Holiday-themed projects past and present Show n' Tell**
December	Happy Holidays! -No Meeting
2026	
January 27th	New Year's Pizza Party & Slide Show
February 24th	
March 24rd	
April 28th	
May 26th	
June 23rd	
July 28th	

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